WARRANTY CARD

1. KH Trading machines and tools are covered by 6/24 months warranty, starting on the date of purchase, as described in the Civil Code (proof of purchase or invoice receipt must be enclosed with the warranty card when making a claim).
2. This warranty does not cover defects caused by unprofessional handling, machine overloads, not complying with instructions contained in this manual, using accessories that are not approved, unauthorized repair, regular wear and tear and damages occurred during transport. Further, this warranty does not cover parts and accessories such as the motor, carbon brushes, seals and hot-air operated parts and parts that need to be changed regularly.
3. If the repair is to be found as not covered by the warranty policy, all costs including the repair and shipping to and from the repair centre will be paid by the customer, according to valid price list. See www.
4. When making a claim, you must present the warranty card, showing the date of the purchase, the serial number of the machine, vendor stamp and signature of sales clerk, as well as the proof of purchase receipt.
5. Warranty claim shall be made at the vendor shop where you bought your machine or you may mail it to a service centre. The vendor is obligated to fill out the warranty card (date of sale, serial number, vendor stamp and signature). All these information must be filled in at the time of sale.
6. The warranty period will be extended for the period of time for which the machine has been in the service centre possession. If the repair or defect is not covered by the warranty policy, all costs including the repair and shipping will be paid by the owner of the machine / tool. We recommend sending the machine in its original packaging. Please, also enclose brief description of the defect with the packaging.
7. Before sending the machine for repair, clean it thoroughly. If the received machine is dirty, it may be rejected by the service shop or you may be charged a cleaning fee.

SERVICE
Logistic centre Klecany
Topolová 483
250 67 Klecany
Czech Republic

Claim department phone number: 266 190 156
266 190 111
Fax: 260 190 100
http://www.KHnet.cz
Email: servis@KHnet.cz

T-mobile: 603 414 975
O2: 601 218 255
Vodafone: 608 227 255

Product: **ELECTRICAL GROOVING PLANE 1KW PLUS**	
Type: **KH-SLP1kW**	Serial number (product series):
Date of manufacture:	Repair centre notes:
Date of sale, stamp, signature:	

Without the correctly filled warranty card or without proof of purchase receipt, including the product type (invoice, purchase receipt) no warranty claim will be processed.

unimax

USER'S MANUAL

ELECTRICAL GROOVING PLANE 1KW PLUS

KH-SLP1kW

Dear customer. Thank you for purchasing equipment from KH Trading, s.r.o.
Our company is ready to offer you our services - before, during and after you buy our product.
If you have any question, comment or idea, please contact our business centre. We will do our best to address your comment or question in timely matter.

Before first use, please read this manual carefully. It is your responsibility to study all instructions, necessary for safe use and operation and to understand all risks that may be involved during the use of power machines.
WARNING! Do not try to use this machine before reading this entire manual and before you know how to handle it. Keep this manual for future reference.
Pay special attention to safety instructions. Not complying with safety rules may cause injury to the operating person or to people standing by or it may cause damage to the machine or to the work piece.
Pay special attention to safety notes and safety labels on the machine.
Never remove or damage them.

Please, write information such as the invoice number and the number of the sale receipt here in this box.

DESCRIPTION

This electrical grooving plane is categorized as electrical device class II. It is an electric hand tool with double insulation, powered by one-phase electric motor. This machine has been designed for wooden surface polishing and planing. Machine is equipped with comfortable grip handle, adjustable side guide and dust collection bag.
All are nicely stored in plastic briefcase.

Spare carbon brushes are supplied with your machine.

TECHNICAL SPECIFICATION

Voltage	~ 230V/50Hz
Power input	1,020 W
Idle revolutions	16,000
Gradually adjustable cutting depth	0 - 3 mm
Gradually adjustable groove depth setting	0 - 15 mm
Width of cutting cylinder	82 mm
Gross weight	2.8 kg

The accuracy of instructions, graphs and information contained herein, depends on the printing date. Due to continuous product improvement, the manufacturer reserves the right to change technical parameters of the product, without prior customer notification.

REPAIR AND MAINTENANCE REPORT

Report and maintenance report:

DATE	REPAIR AND MAINTENANCE REPORT	SERVICE SHOP

REVISION REPORT

The user is obligated to perform tests and revisions of electrical equipment of the machine in accordance with valid rules and regulations. Result report:

DATE	REVISION REPORT	REVISION TECHNICIAN Number / SIGNATURE

SAFETY PRECAUTIONS

- **This device may be used by a qualified person, 18 years or older who has been trained in work and environmental safety procedures.**
- **Any person using this equipment must possess a medical certificate demonstrating his eligibility to operate this equipment.**

Symbols used in this manual

Warning!
This symbol informs you about the risk of personal injury or damage to the machine or materials.

Caution! You are using electrically powered machine!
Risk of injuries by electrical current.

Risk of being caught by spinning machine parts!
Caution! Loose clothing or body parts may get caught by moving machine parts.

Warning!
Danger of damage.

Note:
Additional information.

General instructions

- Make sure you know how to control your tool or machine and that you are familiar with its operating procedure. Know the hazards that may occur, if not used correctly.
- If other person is using this machine make sure that he knows how to safely operate this equipment and that he is familiar with hazards and risk that may occur, if not used correctly.
- Pay special attention to safety notes and safety labels on the machine. Do not remove or damage them. If the warning label becomes unreadable, please contact your vendor.
- Dirty and disorganized workplace may cause accidents.
- Never work in poorly lit, narrow or too crowded rooms. Always keep stable posture.
- Maintain your tools clean and in safe working conditions.
- Handles must be kept free of grease and dirt.
- Make sure no children, unauthorized persons or animals have access to your workshop.
- Use only for purposes for which it has been designed.
- Use personal protective gear such as safety goggles, ear protection, respirator, safe working shoes etc.
- Do not overreach, use both hands.
- Never work under the influence of alcohol or other drugs.
- Do not use the machine/tool if you feel dizzy or week.

- Any modifications or improvements to the machine are strictly prohibited. DO NOT USE if you discover bent part, crack or other damage.
- Never perform any maintenance during operation.
- If you see any unusual sign or hear any strange sound, switch off the machine immediately.
- Do not forget to remove all wrenches and screwdrivers from the machine after use.
- Before use, make sure all screws are tightened securely.
- Perform maintenance regularly. Before use make sure the machine is in good working conditions and without any damage.
- Use only original spare parts during repairs.
- Using extension pieces or accessories not approved by the manufacturer may cause injuries to the operating personnel.
- Use suitable tool for particular type of work. Do not overload tools, accessories or the machine. For large work volume use more powerful machine.
- Do not overload your device. Measure the work load in such way, so it could be done with comfortable speed. Damages due to machine overload are not covered by the warranty policy.
- Do not expose to extremely high temperature or direct sunlight.
- This machine is not designed for use in humid environments or under water.
- If you are not using your machine, store it in a dry and safe place, out of reach of children.
- Before use make sure that all safety elements work correctly and efficiently. Make sure all moving parts are in good working conditions.
- Before use make sure that no part is cracked or stuck, Make sure all parts are attached and assembled as designed. Beware of all other conditions that may have a negative effect on the proper functioning of your machine.
- If not stated otherwise in this manual, all damaged parts and safety elements must be repaired or changed.

Fine mechanics

- Never use a vise to hold you device.
- Protect your machine from fall and impact. When you finish your work store your equipment back inside the briefcase.

Assembly

- Do not use the machine unless completely assembled.

Electrical equipment

- Observe all basic safety rules when using electrical equipment to prevent risk of fire, injuries by electrical shock and other hazards. Before using this device, read this manual entirely and follow all safety instructions.
- Make sure the power cable plug is plugged into the correct wall outlet. The voltage in the wall outlet must be the same as shown on the specification label to prevent damage to the electric motor. Too low voltage will not provide your machine with enough power.
- Before connecting the machine to the wall outlet make sure that the main switch is in the "OFF" position. When you finished your work, disconnect the power plug from the wall outlet and switch off the main switch.
- Never carry electrical tools and appliances by their power cord. When disconnecting the plug from the wall outlet, never pull the cable by its cord.
- Protect the power cable from high temperatures, oils, paint thinners and make sure that the cable is not hanging over sharp edges.

DISPOSAL

When the operational life of your device is over, dispose off it in accordance with valid rules and regulations. Your product is made of metal and plastic parts that may be recycled when separated.

1. Disassemble all parts.
2. Separate all parts according to the material they are made of (e.g. metals, rubber, plastics, etc.). Take the separated parts to the recycling facility near you.
3. Electrical waste (used electrical power tools, electric motors, recharging equipment, electronics, accumulators, batteries etc.).

Dear customer. In accordance with the valid regional rules and regulations describing the management of electrical waste, electrical waste is considered dangerous.
Disposal of electrical waste must be therefore handled as dangerous waste in accordance with waste management rules valid in the state you are in.

It is prohibited to mix electrical waste with regular household waste.
You may return your used electrical appliance to a recycling facility near you. More information about electrical and dangerous waste disposal may be obtained from your local authority or from the Internet.

CAUTION

If the machine breaks down, send it back to the vendor for quick repair.
Please, enclose brief description of the defect. That makes repair easier. If the machine is still covered by warranty, enclose the warranty card and proof of purchase receipt. After the warranty period expires, we repair your machine for a special price.

To prevent possible damages during shipping, packed the machine carefully or use the original packaging material. We are not liable for shipping damages due to incorrect packaging of your machine. If making a claim at the shipping company the level and method of packaging plays a major role during claim evaluation process.

Note: Pictures and contents in this manual may slightly differ from the actual product or accessories. It is due to continuous improvement of our products. Such small differences have no effect on the product functionality.

Changing the carbon brushes

- Inspect the carbon brushes regularly and if the length of the brush is shorter than 5 mm, change it.
- Keep the carbon brushes clean. They must move freely in their casings.
- Always change both brushes at the same time.
- Using a screwdriver unscrew the shavings outlet opening screws, remove the carbon brushes cover and replace the old brushes with new ones.
- Place the covers and the shavings outlet back.

Changing the belt

Worn out belt significantly decreases the efficiency of your power tool.
Unscrew the two screws of the belt cover and remove the cover.
Remove the belt. Turn it and pull it, until it is loose enough to be taken away.
Install the new belt.
Note: the belt must be correctly placed on both belt pulleys.
Clean the machine with brush only. Never use water or other aggressive cleaning solutions.

MAINTENANCE

- Keep your tools clean. Dirt may enter the inner mechanism of your machine and cause damage.
- Do not use aggressive cleaning solution or paint thinners to clean the machine.
- Clean plastic parts with cloth dipped in soup water.
- Clean and lubricate metal surfaces with a cloth dipped in paraffin oil.
- If you are not using your machine, lubricate it with suitable grease and store it in a dry place to prevent corrosion.

In accordance with the applicable law, carbon brushes, spindle and the sleeve are considered expandable material.

Detailed description of the use of this device is not included in this manual, because the manufacturer / distributor assumes that the user is experienced in similar type of work. Also according to the applicable law, this device is considered as a commonly sold and used tool. If the user is unfamiliar with the use of this device, we recommend finding out more information about using this device at the Department of work safety.

Lubrication

Lubricate working surfaces with suitable grease regularly.

- Inspect the power cable regularly. If damaged have it replaced by qualified technician. Inspect extension cables regularly. If damaged, have it replaced.
- If you need to use an extension cable, use cable with appropriate power rating. Use only completely unwound. Inspect extension cables regularly. Damaged cable must be repaired or changed immediately.
- Before performing any maintenance, repair or adjustment, switch off the main switch and disconnect the power cable from the wall outlet.
- Make sure no one may switch you machine incidentally on. Do not keep your fingers close to the main switch, unless absolutely necessary.
- If you mount your machine to the work table, release the safety button after installation.
- Do not use in environments where explosives are stored or used (paint shops, warehouse with flammables etc.).
- Do not use in humid environments or if wet.

Hand tools

- Do not lay aside your machine unless it is completely stopped.
- When placing you machine aside, make sure that the machine is not pressing on its tool.
- Never use a vise to hold you device.
- Always have the work piece securely fastened and use extreme caution when releasing it or handling.

Rotary tools/machines

- Always wear suitable work clothing (do not wear loose clothing, ties, jewellery etc.). Long hair must be covered and tied up behind you head. Do not wear worn out working shoes. Sleeves must be rolled up. Loose clothing or body parts may get caught by moving machine parts.
- Do not remove safety covers. Make sure the operating personnel is well-protected.
- Do not touch or come close with moving machine parts during work. Keep your hands away from moving and spinning machine parts.

Metal turning operations

- Always securely fasten the work piece on the work table using appropriate clamping equipment or vise. Do not hold the work piece in your hands during work. Use both hands to hold the handles of the machine/tool.
- Do not overreach. Maintain stable posture on both legs. That way you will not be thrown out of balance in case of a reverse impact.
- Keep your tools clean and sharp.
- When changing tools or during maintenance, follow safety instructions.
- To feed or move the work piece use appropriate extension tool.
- Make sure the work piece complies with required technical parameters and that is securely fastened.
- Use extra caution when releasing the work piece from the fastening device.

Using your plane

- Make sure the cutting knifes are properly adjusted.
- Inspect your machine regularly for reverse impact protection.
- Make sure the material is fed to the machine in the correct direction that is, against the directions of the spinning cutting head.
- Keep you workplace clean. Make sure no rugs, textiles, ropes and similar items are present.
- Watch your fingers. Do not touch the work piece with your fingers immediately before starting your work.
- Before use make sure that all screws that hold the cutting knifes in place are fastened.

- Before you switch the plane on, make sure that the cutting knifes do not touch the surface of the work piece.
- Wait until the cutting head reaches its speed before touching the work piece.
- Hold the plane firmly with both your hands and maintain distance of at least 20 cm from your body. Keep your hands in safe distance from moving machine parts.
- When you finish your work, place the plane on wooden surface, on its front support flange. Make sure that the cutting edge of the knife does not touch any objects.
- Do not remove wood shavings from the surface with your bare hands. If the shaving outlet is clogged clean it with a stick.
- Use only properly sharpened cutting knifes.
- Before you place the plane on your work table, make sure that the cutting head has stopped completely.
- Use ear protection gear.

⚠ **Power equipment**

- If your machine is equipped with depressed springs, use suitable device to release them slowly and safely.

ASSEMBLY

- Before throwing the packaging material out, make sure no part is left inside. If so, take it out and install it. Use the part listing for check-up and the installation drawing for guidance.
- Before switching your machine on make sure the cutting knife screws are properly tightened.

OPERATION

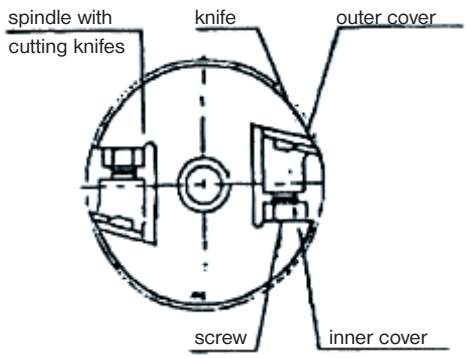
Disassembly of cutting knifes

CAUTION

Use only cutting head that is supplied with the original product, from the manufacturer or from authorized service centre.

The plane must be switched off and the power cable must be disconnected from the wall outlet. Wait until the cutting head comes to a complete stop before attempting any knife exchange.

- Use the supplied wrench to release the three fastening screws.
- You may remove only the knife or the outer cover as well. Place the new knife (with the same weight and dimensions as the original one) in the groove. Otherwise the spindle will vibrate, the quality of the cut will not be adequate or you may even damage the tool.
- Fix the knife in place so its edge is touching the guiding rule.
- Place the inner cover on the knife edge so the curved end of the cover is touching the rear part of the ruler along its entire length.



- Tighten the inner cover screws.
- When the screws are properly fastened, place the knife inside the spindle so the curved end of the inner cover extends beyond and into the applicable spindle groove.
- Now, tighten the three screws with the supplied wrench.

CAUTION

When fixing the knife inside the spindle make sure the screws are tightened.

Otherwise injuries may occur. Always inspect the correct knife position and that all screws are tightened properly.

The cutting edge of the knife must be parallel with the flange. Otherwise the surface will not be evenly finished.

Setting the cutting depth

- You may set the cutting depth from 0 - 2 mm.
- Turning the adjustment screw clockwise increases the cutting depth.
- Turning the adjustment screw counter clockwise decreases the cutting depth.

Cutting depth adjusting screw

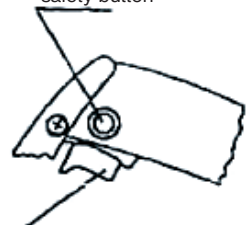
CAUTION

Before using your machine make sure that the vacuum system is properly connected to the dust outlet on the plane.

Switch function

- You may switch your machine on by pressing on the safety button and then by pressing the trigger.

safety button



trigger

CAUTION

You may press the trigger only after you have pressed the safety button.

- When you machine is on, you may release the safety button.
- If you wish to switch your machine off, simply release the trigger.

CAUTION

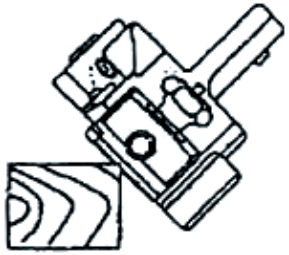
Before switching your machine on make sure that the trigger may be pressed all the way down.

Operation

- First, place the flange of the plane on the work piece surface. Make sure the cutting knifes are not touching the surface of the work piece.
- Press the trigger.
- Wait until the plane reaches its full speed and start to move it towards the work piece. At the beginning apply more pressure on the front part of you machine and at the end of the surface, apply more pressure on the rear part of your machine.
- The final result depends on the revolutions versus the cutting depth. If you cutting simple grooves you may increase the cutting depth.

Working on edges

During operation as shown on picture 5, align the V groove on the front cover with the edge of the work piece and start to work.



CAUTION

Before performing any maintenance make sure that the power cable is disconnected from the wall outlet and that the main switch is switched off.